

**Abstract****A Stator Core**

5        A stator core 2 comprises laminations (9) of low loss  
stator iron forming a body of magnetic nature and lamination  
components (11) of high thermal conductivity material  
regularly arranged within that body. The high thermal  
conductivity components (11) increasing the effective radial  
10 thermal conductivity rate of the core 2 whereby temperature  
gradients are reduced in comparison with previous stator  
cores. Thus, there is a reduction in operational temperature  
of the electrical insulation on the stator windings.

15 (Fig 2)